We claim:

1. A catalyst system for the reduction of $NO_x$ in effluent gases from combustion sources comprising:

a catalyst comprising

a metal oxide catalyst support,

a catalytic metal oxide comprising at least one of gallium oxide and indium oxide, and

a promoting metal comprising at least one of silver, cobalt, vanadium, molybdenum, tungsten, zinc, tin and bismuth,

wherein the catalyst comprises about 5 to about 31 mol% catalytic metal oxide and about 0.5 to about 9 mol% promoting metal; and

a reductant, comprising a fluid hydrocarbon having at least 4 carbon atoms.

2. The catalyst system of claim 1, wherein the metal oxide catalyst support comprises at least one of alumina, titania, zirconia, and ceria.

3. The catalyst system of claim 1 wherein the promoting metal further comprises indium.

4. The catalyst system of claim 3 wherein the catalyst comprises about 1 to about 5 mol% indium.

5. The catalyst system of claim 1, wherein the catalyst comprises from about 25 to about 31 mol% gallium oxide.

6. The catalyst system of claim 1, wherein the promoting metal comprises silver.

7. The catalyst system of claim 6, wherein the catalyst comprises from about 1 to about 4 mol% silver.

8. The catalyst system of claim 1, wherein the promoting metal comprises cobalt.

9. The catalyst system of claim 8, wherein the catalyst comprises from about 1 to about 4 mol% cobalt.

10. The catalyst system of claim 1, wherein the catalyst comprises from about 1 to about 5 mol% tungsten.

11. The catalyst system of claim 1, wherein the catalyst comprises from about 1 to about 5 mol% molybdenum.

12. The catalyst system of claim 1, wherein the catalyst comprises about 20 mol% to about 30 mol% gallium oxide and about 1 mol% to about 4 mol% indium oxide.

13. The catalyst system of claim 1, wherein the reductant is gasoline.

14. The catalyst system of claim 1, wherein the reductant comprises a hydrocarbon having eight carbon atoms.

15. A catalyst system for the reduction of $NO_x$ in effluent gases from combustion sources comprising:

a catalyst comprising

a metal oxide catalyst support, wherein the metal oxide catalyst support comprises alumina,

a catalytic metal oxide, wherein the catalytic metal oxide is selected from the group consisting of gallium oxide, indium oxide, and combinations thereof, and

a promoting metal, wherein the promoting metal is selected from the group consisting of silver, cobalt, vanadium, molybdenum, tungsten, zinc, tin, bismuth, and combinations thereof,

wherein the catalyst comprises about 5 to about 31 mol% catalytic metal oxide and about 0.5 to about 9 mol% promoting metal; and

a reductant, comprising a fluid hydrocarbon having at least 4 carbon atoms.

16. A method for reducing NOx from an effluent gas comprising:

mixing a NOx containing effluent gas with a fluid hydrocarbon reductant comprising at least carbon atoms to create a gas mixture; and

passing the gas mixture through a catalyst, wherein the catalyst comprises

a metal oxide catalyst support,

a catalytic metal oxide comprising at least one of gallium oxide and indium oxide,

a promoting metal comprising at least one of silver, cobalt, vanadium, molybdenum, tungsten, zinc, tin and bismuth,

wherein the catalyst comprises about 5 to about 31 mol% catalytic metal oxide and about 0.5 to about 9 mol% promoting metal.

17. The method of claim 16, wherein the reductant and the NOx are present in a C:$NO_x$ molar ratio from about 1:1 to about 24:1.

18. The method of claim 16, wherein the reductant comprises gasoline.

19. The method of claim 16, wherein the reductant comprises a hydrocarbon having eight carbon atoms.

20. The method of claim 16, wherein the gas mixture further comprises at least 1.0 % water by volume.

21. The method of claim 20, wherein the gas mixture comprises about 7 to about 9 % water by volume.

22. The method of claim 16, wherein the gas mixture is between about 300 and about 600°C.

23. The method of claim 23, wherein the gas mixture is between about 350 and about 450°C.